

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF PUBLIC INSTRUCTION

**ANALYSIS OF BOOK MATERIAL
IN THE
FIELD OF INDUSTRIAL EDUCATION**

62



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FOREWORD

Industrial education continues to experience a rapid growth. A large number of publishing companies are attempting to meet the demand, caused by this growth, by publishing text and reference material on the various subjects of industrial education.

School administrators and teachers are writing to the Department of Public Instruction, to teacher training institutions, and to the various cities in an effort to ascertain what text and reference material has been accepted as the best available.

Committees have been appointed, for another year, to assist in the evaluation of this material. Members of these committees were selected after a careful review of the teachers of industrial education in Pennsylvania. They were selected as being among the leaders in their respective fields.

The members of these committees are not given to passing upon material with snap judgment. Their evaluation will be based, as far as possible, upon the criteria set up in this pamphlet. Group judgment will be required in making this evaluation. This should assure fair and due consideration to all the text and reference books submitted by the various companies. Following the review, the books will be disposed of according to the wishes of the various companies. The heartiest cooperation of book companies and the members of these committees is solicited and appreciated.

This pamphlet was prepared under the direction of L. H. Dennis, Deputy Superintendent of Public Instruction, by M. M. Walter, Professor of Industrial Education, The Pennsylvania State College, State College; George Parkes, Director of Vocational Education, Williamsport, Pennsylvania; and P. L. Cressman, Assistant Director of Vocational Education, Vocational Bureau, Department of Public Instruction. The latter three persons served in the capacity of General Steering Committee.

JAMES N. RULE,
Superintendent of Public Instruction

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ANALYSIS OF BOOK MATERIAL IN THE FIELD OF INDUSTRIAL EDUCATION

Purpose

To review the book material in the field of Industrial Education, and evaluate the subject matter in terms of its suitability for Industrial Arts, Trade Preparatory and Trade Extension Education.

Main Divisions of Subject Matter

SHOP WORK

Aeronautics
Automotive
Bricklaying
Electrical
Interior Decorating
Machine Shop
Patternmaking and Foundry
Plumbing
Printing
Sheet Metal
Tailoring
Woodworking

RELATED

Drafting
English
Hygiene
Mathematics
Safety
Science
Social Science

LETTER TO THE PUBLISHING COMPANIES

To the
Publishers of Text Books

Attention of Education Department

GENTLEMEN:

Committees of directors and teachers of industrial education in Pennsylvania have been appointed to continue the review of the new text and reference material in the field of industrial education. These committees are to evaluate the subject matter in terms of its suitability for use in industrial arts, trade preparatory and trade extension education. Following this review and evaluation those books receiving a high rating will be added to the State list compiled this last year. A list of those books, which were approved this last year by the committees, can be secured from the Department of Public Instruction.

You are invited to submit books to the committees for review. The books, with any descriptive matter pertaining to them and **their authors**, should be sent directly to the individuals on the committees. In related and academic subjects please send **only books that are particularly appropriate** for students enrolled in industrial education courses.

Your attention is called to the list of members on the various committees as published on pages 8, 9 and 10, of this pamphlet. It is suggested that you send a copy of each book you wish to have reviewed to each individual member of the committee. You will be sending woodworking books to the woodworking committee, etc. We expect ratings from all members of each committee.

You will be interested in reviewing this entire pamphlet to note the criteria set up and the instructions to the committee members.

Correspondence and home study publishers submitting text material in pamphlet form should group the pamphlets into volumes, each volume containing pamphlets pertaining to a given subject.

Will you kindly inform each member of the committee, to whom you send books, how to dispose of the books following their review? The committee members will cheerfully carry out your wishes in this respect.

Your continued cooperation will be greatly appreciated.

Sincerely yours,

F. T. Struck, Chairman
George H. Parkes
P. L. Cressman

General Steering Committee

DIRECTIONS TO COMMITTEE MEMBERS

The publishing houses will submit books directly to you for review. Please carry out their instructions in the disposal of these books following the review.

Read this entire pamphlet carefully before you start to make an analysis of the book or pamphlet.

The committees on related subjects such as drafting, science and mathematics, should consult with shop teachers concerning the value of the books submitted.

The committees in bricklaying, interior decorating, plumbing and tailoring will have a limited number of books to review. For this reason, special effort should be made by the committee members to select good pamphlets, bulletins, and magazines, as well as books.

The drafting committee will review material on all phases of this subject as blue print reading, shop sketching, architectural drawing, mechanical drawing, sheet metal drafting, etc.

The electrical committee will include in their review material covering such subjects as, bell wiring, house wiring, armature winding, general motor repair, telephony, radio, electro plating, etc.

Publishers have been instructed to submit in the fields of English, social science and related subjects, books that are appropriate for students enrolled in trade and industrial courses only. Books intended for the use of college preparatory students will not be reviewed by these committees.

Use the four-page leaflet as appears on pages 11, 12, 13, and 14 of this pamphlet, to record your rating. Copies will be furnished to you by the Department of Public Instruction. Use one leaflet for each book reviewed.

Rate the book only in the field or fields for which you believe it is adaptable, as Industrial Arts, Trade Preparatory or Trade Extension Education.

The method of rating followed in this analysis is on the basis of poor, fair and good.

Place a circle around the figure in the column that indicates the rating that you believe each item deserves and carry out the plan as indicated in the "sample" copy.

If the Criteria II does not apply in the review of some particular book as supplementary books containing lists of projects, avoid rating it in that particular item.

Suggest a list of good trade journals and magazines that you recommend for use in your field. List them on one of the score sheets. See page 15.

If there is any question in your mind whether any book you receive should be evaluated in your field, refer the matter to the chairman of your committee for instructions.

If you have any difficulty with the analysis, refer the problem to the General Steering Committee.

As soon as the analysis is completed, send the leaflet with the evaluation to the Industrial Bureau of the Department of Public Instruction, Harrisburg, Pennsylvania.

COMMITTEES

General Steering Committee

- (1) Dr. F. T. Struck
Head, Dept. Industrial Education
Pennsylvania State College
State College, Pennsylvania
- (2) George H. Parkes
Director of Vocational Education
Williamsport, Pennsylvania
- (3) P. L. Cressman
Assistant Director of Vocational Education
Department of Public Instruction
Harrisburg, Pennsylvania

Aeronautics

- (1) Mr. John W. Campbell, Chair-
man
West Newton Road
Greensburg, Pennsylvania
- (2) Mr. George K. Harbold
611 Walnut Street
Lebanon, Pennsylvania
- (3) Mr. Wilfred Settle
High School Building
Uniontown, Pennsylvania

Drafting

- (1) Mr. Harold E. Schofield, Chair-
man
532 Righter Street
Wissahickon, Philadelphia,
Pennsylvania
- (2) Mr. J. P. Manning
Director of Vocational Education
Braddock, Pennsylvania
- (3) Mr. Clarence J. Ayres
234 North 12th Street
Allentown, Pennsylvania

Automotive

- (1) Mr. Ralph K. Beamer, Chairman
9 Hardy Street
Crafton, Pittsburgh, Pennsyl-
vania
- (2) Mr. Elias K. Freed
Grant Building
17th and Pine Streets
Philadelphia, Pennsylvania
- (3) Mr. John W. Wilson
428 W. North
Bethlehem, Pennsylvania

Electrical

- (1) Mr. Charles E. Marks, Chairman
134 Purse Avenue
Johnstown, Pennsylvania
- (2) Mr. Willard T. Taggart
2804 Curtin Street
Harrisburg, Pennsylvania
- (3) Mr. Ralph W. Shimer
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Bethlehem, Pennsylvania

Bricklaying

- (1) Mr. R. A. Zartman, Chairman
246 Fisk Street
Pittsburgh, Pennsylvania
- (2) Mr. W. McMullen
2438 Mansfield Road
Drexel Park, Pennsylvania
- (3) Mr. J. R. Bell
Supt., Building Arts Dept.
Pennsylvania Industrial School
Huntingdon, Pennsylvania

English

- (1) Mr. W. S. McDermott, Chairman
3015 Glen Mawr Avenue
Pittsburgh, Pennsylvania
- (2) Miss Anna Galore
1010 Main Street
Aliquippa, Pennsylvania
- (3) Mr. J. T. Shuman
1018 Park Avenue
Williamsport, Pennsylvania

Interior Decorating

(1) Mr. Walter B. Godsall, Chairman
513 Walnut Street
Jenkintown, Pennsylvania

(2) Mr. Leonard H. Rothemal
Junior High School Building
Ambridge, Pennsylvania

(3)

Plumbing

(1) Mr. Harold Wilson, Chairman
6335 Howe Street
Pittsburgh, Pennsylvania

(2) Mr. E. H. Rinear
960 East Russell Street
Philadelphia, Pennsylvania

(3) Mr. Charles Plumber
820 6th Avenue
Altoona, Pennsylvania

Machine Shop

(1) Mr. George McLaughlin, Chairman
Director of Vocational Education
Lancaster, Pennsylvania

(2) Mr. Frank Hower
446 Wonder Street
Johnstown, Pennsylvania

(3) Mr. H. B. Herr
Wm. Penn Senior High School
York, Pennsylvania

Printing

(1) Mr. Dean Conner, Chairman
212 Adeline Avenue
Pittsburgh, Pennsylvania

(2) Mr. Elmer F. Vosburg
Norwood, Pennsylvania

(3) Mr. William J. Brown
36 Center Street
Forty Fort, Pennsylvania

Mathematics

(1) Mr. Edwin French, Chairman
Director of Vocational Education
Aliquippa, Pennsylvania

(2) Mr. A. K. Patterson
634 W. 4th Street
Williamsport, Pennsylvania

(3) Mr. W. O. Cressman
Director of Vocational Education
Pottstown, Pennsylvania

Safety and Hygiene

(1) Mr. Theodore A. Siedle, Chairman
Department of Vocational Education
University of Pittsburgh
Pittsburgh, Pennsylvania

(2) Mr. Ben F. Slingluff
Special Assistant
5531 Greenway Avenue
West Philadelphia, Pennsylvania

(3) Mr. Charles R. Smith
213 North Paxton Street
Philadelphia, Pennsylvania

Patternmaking and Foundry

(1) Mr. David Baker, Chairman
9 Parkway Avenue
Chester, Pennsylvania

(2) Mr. L. H. Quay
722 Rural Avenue
Williamsport, Pennsylvania

(3) Mr. H. B. Seville
231 East Jackson Street
York, Pennsylvania

Science

(1) Mr. H. A. Ziel, Chairman
30 South Linwood Avenue
Crafton, Pittsburgh, Pennsylvania

(2) Mr. E. F. Ottmyer
Springdale and Arlington Roads
York, Pennsylvania

(3) Mr. Charles R. Engels
1930 Kemmerer Street
Bethlehem, Pennsylvania

Sheet Metal

- (1) Mr. Charles Geisler, Chairman
Director of Vocational Education
North Braddock, Pennsylvania
- (2) Mr. M. L. Haas
81 North Duane Avenue
Ingram, Pittsburgh, Pennsylvania
- (3) Mr. C. H. Derby
209 East 28th Street
Erie, Pennsylvania

Tailoring

- (1) Mr. Vincent Cassaccio, Chairman
1515 North Felton Street
Philadelphia, Pennsylvania
- (2) Mr. L. C. Martin
Soldiers' Orphan School
Scotland, Pennsylvania
- (3) Mr. H. E. Fritz
216 West 11th Street
Erie, Pennsylvania

Social Science

- (1) Mr. Monroe W. Sloyer, Chairman
R. D. No. 5 (Eden West)
Lancaster, Pennsylvania
- (2) Mr. Hannum Brackin
High School Building
Coatesville, Pennsylvania
- (3) Mr. W. L. McKerahan
918 Savannah Avenue
Pittsburgh, Pennsylvania

Welding

- (1) Mr. Clyde N. Snyder
3818 5th Avenue
Altoona, Pennsylvania
- (2) Mr. Campbell Maryan
853 Neuton Avenue
Lawrence Park, Erie, Pennsylvania
- (3) Mr. C. D. Moore
Assistant Superintendent
Trades Training Department
Westinghouse Electric and
Manufacturing Company
East Pittsburgh, Pennsylvania

Woodworking

- (1) Mr. W. J. Groschke, Chairman
Director of Vocational Education
Erie, Pennsylvania
- (2) Mr. Edward Ciriacy
Box 1386
Aliquippa, Pennsylvania
- (3) Mr. Charles Haire
104 South Cedar Street
Hazleton, Pennsylvania

Commonwealth of Pennsylvania
DEPARTMENT OF PUBLIC INSTRUCTION
BUREAU OF VOCATIONAL EDUCATION

Division of Industrial and Continuation School Education
Harrisburg

SCORE SHEET FOR ANALYSIS OF BOOK MATERIAL
IN THE FIELD OF INDUSTRIAL EDUCATION

Name of Book

Name of Publisher

I suggest that this book can be used to advantage as

.....

It might also be used as

EVALUATION SUMMARY

| | Maximum Possible | Industrial Arts | Trade Pre- paratory | Trade Extension |
|---|---------------------|--------------------|------------------------|--------------------|
| I Subject matter content | 70 — | | | |
| II Drills and Re- views | 6 — | | | |
| III Kinds and types of illustrations | 12 — | | | |
| IV Mechanical Phases | 7 — | | | |
| V Author's expe- rience and training | 5 — | | | |
| Total Score ... | 100 — | | | |

Signed

Scorer

I

Subject Matter Content as a Whole

| | | | Industrial Arts | | | Trade Preparatory | | | Trade Extension | | |
|--|--|--|-----------------|------|------|-------------------|------|------|-----------------|------|------|
| | | | Poor | Fair | Good | Poor | Fair | Good | Poor | Fair | Good |
| A. The text should contain valuable learning experiences for each pupil | | | | | | | | | | | |
| Factors | | | | | | | | | | | |
| 1. Do the experiences compare with modern industrial practice? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 2. Are the experiences presented in the language of industry? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 3. Are the experiences concrete? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 4. Are the experiences treated according to their importance? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| B. The subject matter lends itself to the encouragement of much pupil participation | | | | | | | | | | | |
| Factors | | | | | | | | | | | |
| 5. Is the subject matter written in clear concise English within the comprehension of the pupil? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 6. Does the text deal with things which do or will function in the life of the pupil? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 7. Do the experiences meet the needs of the pupil? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 8. Is the subject matter adjusted to the pupil's present abilities and capacities? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 9. Do the experiences provide satisfaction on the part of the pupil? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 10. Are the new experiences associated with, and do they contain elements of past experiences? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 11. Do simple experiences provide for the pupil? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| C. The subject matter should provide information interesting for its own sake. | | | | | | | | | | | |
| Factors | | | | | | | | | | | |
| 12. Is the subject matter valuable to the extent pursued? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 13. Does the subject matter go from the concrete to the abstract? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| 14. Does the related subject matter correlate with shop practice? ----- | | | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| Score----- | | | | | | Score----- | | | | | |

II

Drills, Tests, Summaries Reviews

| | Industrial Arts | | | Trade Preparatory | | | Trade Extension | | |
|--|-----------------|------|------|-------------------|------|------|-----------------|------|------|
| | Poor | Fair | Good | Poor | Fair | Good | Poor | Fair | Good |
| A. Does the total number of items, examples, problems, statements, and questions found in drills, tests, summaries, reviews adequately meet the needs of this type of education? ----- | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| B. Are they properly distributed? ----- | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | Score----- | | | Score----- | | | Score----- | | |

III

Illustrations

| | Industrial Arts | | | Trade Preparatory | | | Trade Extension | | |
|---|-----------------|------|------|-------------------|------|------|-----------------|------|------|
| | Poor | Fair | Good | Poor | Fair | Good | Poor | Fair | Good |
| A. Does the book contain sufficient illustrations to meet the needs of your special field, according to the following classifications? ----- Consider the following points in evaluating item A: | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| 1. Machinery—including sketches or pictures of machines ----- | | | | | | | | | |
| 2. Pictures of Activities—Actions performed by people, but not necessarily done by the pupil, as oiling a machine ----- | | | | | | | | | |
| 3. Pictures of Procedures or Directed Activities—showing pupils how to perform experiences, to measure, etc. ----- | | | | | | | | | |
| 4. Charts, Diagrams, Tables ----- | | | | | | | | | |
| 5. Graphs ----- | | | | | | | | | |
| 6. All other illustrations ----- | | | | | | | | | |
| B. Are the illustrations representative of the subject? ----- | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| C. Are the illustrations clear? ----- | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| D. Are the illustrations up-to-date? ----- | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| E. Are the illustrations well planned? ----- | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| F. Are letters or numbers used for reference purposes? ----- | .5 | 1.25 | 2 | .5 | 1.25 | 2 | .5 | 1.25 | 2 |
| | Score----- | | | Score----- | | | Score----- | | |

IV

Mechanical Phases and Cost

Do the mechanical phases of the book possess the qualities adequate for use in this field? The following points should be rated.

| | Industrial Arts | | | Trade Preparatory | | | Trade Extension | | |
|--|-----------------|------|------|-------------------|------|------|-----------------|------|------|
| | Poor | Fair | Good | Poor | Fair | Good | Poor | Fair | Good |
| A. Size ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| B. Binding ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| C. Covers ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| D. Paper ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| E. Type ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| F. Spacing ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| G. Cost (in relation to Mechanical Phases) ----- | .25 | .625 | 1 | .25 | .625 | 1 | .25 | .625 | 1 |
| | Score----- | | | Score----- | | | Score----- | | |

V

Authors

| | Industrial Arts | | | Trade Preparatory | | | Trade Extension | | |
|--|-----------------|------|------|-------------------|------|------|-----------------|------|------|
| | Poor | Fair | Good | Poor | Fair | Good | Poor | Fair | Good |
| A. Has the education, training and experience of the author been sufficient to qualify him as an authority in this field? ----- (Information to be obtained from personal knowledge or from publishing houses.) | 1 | 3 | 5 | 1 | 3 | 5 | 1 | 3 | 5 |
| | Score----- | | | Score----- | | | Score----- | | |

A suggested list of trade journals and magazines for the -----field.

| Name of Magazine | Publisher | Address | Subscription rate |
|------------------|-----------|---------|-------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
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